C1 A second embodiment of the present invention is characterized in that it comprises steps of forming an amorphous silicon film; holding a metal element which promotes crystallization of silicon in contact on the surface of the amorphous silicon film; crystallizing the amorphous silicon film by implementing a first heat treatment to obtain a crystal silicon film; forming a thermal oxide film on the surface of the crystal silicon film by implementing a second heat treatment in the temperature range of 500° C to 700° C within an atmosphere containing oxygen, hydrogen, fluorine and chlorine; and eliminating the thermal oxide film.

Please replace the paragraph bridging pages 8 and 9 with the following:

C2 According to a preferred mode for carrying out the invention disclosed in the present specification, an amorphous silicon film is formed on a glass substrate at first. Then, the amorphous silicon film is crystallized by an action of metal element typified by nickel which promotes crystallization of silicon to obtain a crystal silicon film. This crystallization is carried out by a heat treatment in a temperature of 500° C to 700° C. The metal element is contained in the crystal silicon film in the state in which the film has been crystallized by the above-mentioned heat treatment.

Please replace the third paragraph on page 10 with the following:

C3 A fabrication process of the present embodiment will be explained by using FIG. 1 below. At first, a silicon oxide film 102 is formed as an underlying film in a thickness of 3000 angstrom on the glass substrate 101 of Corning 1737 (distortion point: 667° C).

Please replace the fifth paragraph on page 13 with the following:

C4 Next, a heat treatment is implemented in the temperature range from 500° C to 700° C in the state shown in FIG. 1B to crystallize the amorphous silicon film 103 and to obtain a crystal silicon film 105. This heat treatment is implemented in a nitrogen atmosphere containing 3% of hydrogen at 640° C.

Please replace the paragraph bridging pages 13 and 14 with the following:

C4 It is preferable to implement the heat treatment below the temperature of the distortion point of the glass substrate. Because the distortion point of the Corning 1737 glass substrate is 667° C, the upper limit of the heating temperature here is preferable to be about 650° C, leaving some margin.

Please replace the third paragraph on page 15 with the following:

C5 Here, this heat treatment is implemented within an oxygen atmosphere containing 3% of hydrogen at 100 ppm of CLF3 at 640° C. In this step, the thermal oxide film is formed in a thickness of 200 angstrom (FIG. 1D).

Please replace the fifth paragraph on page 15 with the following:

C6 This heat treatment is implemented at a temperature range from 500 to 700° C. The upper limit of the heating temperature is limited by the distortion point of the glass substrate used. One must be careful not to implement the heat treatment above the distortion point of the glass substrate because, otherwise, the substrate deforms.

Please replace the last paragraph on page 17 with the following:

C7 The present embodiment relates to a case of growing crystal in the form different from that in the first embodiment. That is, the present embodiment relates to a method of growing the crystal in a direction parallel to the substrate, i.e. a method called lateral growth, by utilizing the metal element which promotes crystallization of silicon.

Please replace the first paragraph on page 18 with the following:

C7 FIG. 2 shows the fabrication process according to the present embodiment. At first, a silicon oxide film is formed as an underlying film 202 in a thickness of 3000 angstrom on the Corning 1737 glass substrate (or a quartz substrate) 201.

Please replace the fourth paragraph on page 18 with the following:

C8 The opening 205 has a thin and long rectangular shape in the longitudinal direction from the depth to the front side of the figure. Preferably, the width of the opening 203 is 20 $\mu$m or more. The length thereof in the longitudinal direction may be determined arbitrarily.

Please replace the paragraph bridging pages 18 and 19 with the following:

C9 Next, a heat treatment is implemented at 640° C for four hours in a nitrogen atmosphere containing 3% of hydrogen and in which oxygen is minimized. Then, crystal grows in the direction parallel to the substrate as indicated by the reference numeral 207 in FIG. 2B. This crystal growth advances from the domain of the opening 205 to which nickel element has been introduced to the surrounding part. This crystal growth in the direction parallel to the substrate will be referred to as lateral growth.

[Please replace the first full paragraph on page 19 with the following:]

It is possible to advance this lateral growth across more than 100 $\mu$m under the conditions shown in the present embodiment. Then, a silicon film 208 having the domain in which the crystal has thus grown laterally is obtained. It is noted that crystal growth in the vertical direction called vertical growth advances from the surface of the silicon film to the underlying interface in the domain where the opening 205 is formed.

Please replace the first paragraph on page 20 with the following:

C10 After irradiating the laser light, a heat treatment is implemented at 650° C for 12 hours within an atmosphere containing 3% of hydrogen and 100 ppm of $NF_3$. In this step, an oxide film 209 containing nickel element in high concentration is formed in a thickness of 200 angstrom. In the same time, the concentration of nickel element within the silicon film 208 may be reduced relatively (FIG. 2D).

Please replace the second paragraph on page 21 with the following:

C11 Then, a thermal oxide film 211 is formed after thus forming the pattern 210. This thermal oxide film is formed into a thickness of 200 angstrom by implementing a heat treatment for 12 hours in an oxygen atmosphere at 650° C.

Please replace the paragraph bridging pages 22 and 23 with the following:

C12 After removing the organic substances, thermal oxidation is implemented within an oxygen atmosphere at 640° C to form a thermal oxide film 300 of 100 angstrom thick. This thermal oxide film has a high interfacial characteristic with a semiconductor layer and composes a part of a gate insulating film later. Thus, the state shown in FIG. 3A is obtained.

Please replace the last paragraph on page 24 with the following:

C13 The anodic oxide film may be grown up to several $\mu$m thick. The thickness is 6000 angstrom here. It is noted that the range of the growth may be controlled by adjusting an anodizing time.

On page 27, immediately after the sixth paragraph, please delete [0159]. ✓

Please replace the first paragraph on page 30 with the following:

Sub B3

C14

Then, contact holes are created to form a source electrode 416 and a drain electrode 417. Finally, a heat treatment of an hour is implemented within a hydrogen atmosphere at 350° C (hydrogen heat treatment). In this step, the defects and unpaired coupling hands within the active layer are neutralized. Thus, the thin film transistor shown in FIG. 4E is completed.

Please replace the third paragraph on page 33 with the following:

C15

Further, an interlayer insulating film 524 made of a resin material is formed by means of spin coating. Here, the thickness of the interlayer insulating film 524 is 1 $\mu$m (FIG. 5E).

Please replace the fourth and fifth paragraphs on page 35 with the following:

C6

Next, a heat treatment is implemented within a nitrogen atmosphere containing 3% of hydrogen at 650° C to crystallize the amorphous silicon film 605 and to obtain a crystal silicon film 606.

After forming the amorphous silicon film, a heat treatment is implemented within an oxygen atmosphere containing 5% of HCl and 100 ppm (volume) of $NF_3$ at 650° C. A thermal oxide film 609 is formed in this heat treatment (FIG. 6C).